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Gartenstrasse 15, 89077 Ulm (DE); **SCHLEIER, Chris-**
tian [DE/DE]; Wasserburger Weg 123, 89312 Günzburg
(DE).

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(74) Agent: **PFENNING, MEINIG & PARTNER GBR**;
Joachimstaler Strasse 10-12, 10719 Berlin (DE).

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(71) Applicant (*for all designated States except US*): **REINZ-**
DICHTUNGS-GMBH [DE/DE]; Reinzstrasse 3-7, 89233
Neu-Ulm (DE).

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(71) Applicant (*for US only*): **GAUGLER, Bernd** [DE/DE];
Kohlgrasse 15, 89073 Ulm (DE).

(72) Inventors; and

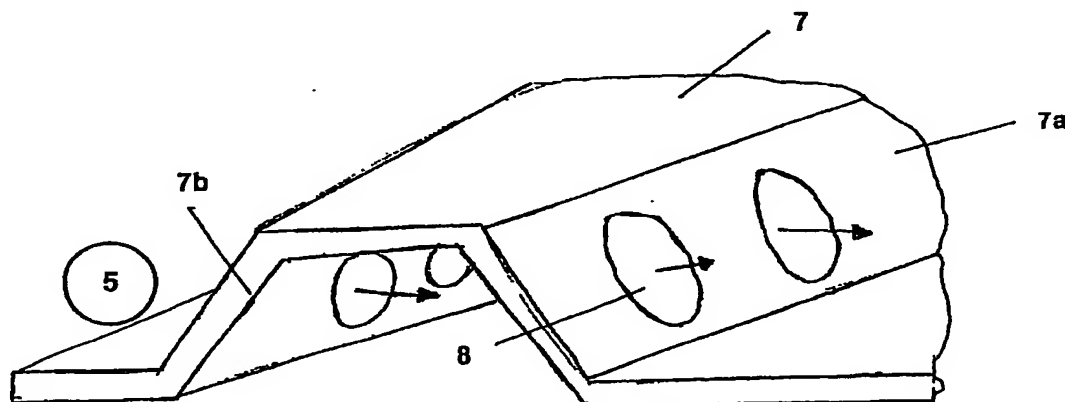
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(75) Inventors/Applicants (*for US only*): **SAILER, Albrecht**
[DE/DE]; Bgm.-Lopp-Strasse 4, 89233 Neu-Ulm (DE).
✓ **KUNZ, Claudia** [DE/DE]; Neue Strasse 125, 89073
Ulm (DE). **SCHERER, Joachim** [DE/DE]; Sachsenweg
67, 89075 Ulm (DE). **STRÖBEL, Raimund** [DE/DE];

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(54) Title: ELECTROCHEMICAL SYSTEM



(57) Abstract: The invention deals with an electrochemical system for compressing gases and/or for producing gases by electrolysis, consisting of an electrochemical compressor stack (1) having layering of several electrochemical cells, which are separated from one another in each case by bipolar plates (3; 3'), wherein the bipolar plates have openings for media supply and media discharge (5a, 5b) for the electrochemical cells and the electrochemical cell stack can be placed under mechanical compressive strain in direction (6) of the layering. The bead arrangements (7; 7') are resilient and are provided at least in some regions to seal the openings (4, 5a, 5b) and/or an electrochemically active region (10) of the electrochemical cells.